

AMENDMENTS TO THE CLAIMS

1-5. **(Cancelled)**.

6. **(Previously Presented)** An isolated nucleic acid comprising the nucleotide sequence of SEQ ID NO:1.

7-42. **(Cancelled)**

43. **(Previously Presented)** An isolated nucleic acid comprising a nucleotide sequence coding for the amino acid sequence of SEQ ID NO:2.

44-77. **(Cancelled)**

78. **(Currently Amended)** An isolated nucleic acid comprising a nucleotide sequence coding for an amino acid sequence of a protein which produces raffinose by combining a D-galactosyl group through an $\alpha(1 \rightarrow 6)$ bond with a hydroxyl group attached to the carbon atom at position 6 of a D-glucose residue in a sucrose molecule. The nucleic acid according to claim 52, wherein said nucleotide sequence comprises a nucleotide sequence selected from the group consisting of:

- (a) athe nucleotide sequence of SEQ ID NO:1, and
- (b) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:2;
- (c) a nucleotide sequence of SEQ ID NO:3, and
- (d) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:4.

79. (Currently Amended) A chimeric gene comprising a nucleic acid comprising a nucleotide sequence coding for an amino acid sequence of a protein which produces raffinose by combining a D-galactosyl group through an $\alpha(1\rightarrow6)$ bond with a hydroxyl group attached to the carbon atom at position 6 of a D-glucose residue in a sucrose molecule, The chimeric gene according to claim 59, wherein said nucleotide sequence comprises a nucleotide sequence selected from the group consisting of:

- (a) a-the nucleotide sequence of SEQ ID NO:1, and
- (b) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:2;
- (c) a nucleotide sequence of SEQ ID NO:3, and
- (d) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:4.

80. (Currently Amended) A plasmid comprising a nucleic acid comprising a nucleotide sequence coding for an amino acid sequence of a protein which produces raffinose by combining a D-galactosyl group through an $\alpha(1\rightarrow6)$ bond with a hydroxyl group attached to the carbon atom at position 6 of a D-glucose residue in a sucrose molecule, The plasmid according to claim 65, wherein said nucleotide sequence comprises a nucleotide sequence selected from the group consisting of:

- (a) a-the nucleotide sequence of SEQ ID NO: 1, and
- (b) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:2;
- (c) a nucleotide sequence of SEQ ID NO:3, and
- (d) a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:4.

81. (Currently Amended) A method for metabolic modification, which comprises introducing a nucleic acid comprising a nucleotide sequence coding for an amino acid sequence of a protein which produces raffinose by combining a D-galactosyl group through an $\alpha(1\rightarrow6)$ bond with a hydroxyl group attached to the carbon atom at position 6 of a D-glucose residue in a sucrose molecule, The method for metabolic modification according to claim 73, wherein said nucleotide sequence comprises a nucleotide sequence selected from the group consisting of:

- (a) ~~a nucleotide sequence of SEQ ID NO:1, and~~
- (b) ~~a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:2;~~
- (c) ~~a nucleotide sequence of SEQ ID NO:3, and~~
- (d) ~~a nucleotide sequence encoding the amino acid sequence of SEQ ID NO:4.~~

82. – 86. (Cancelled)